

Fig. 1

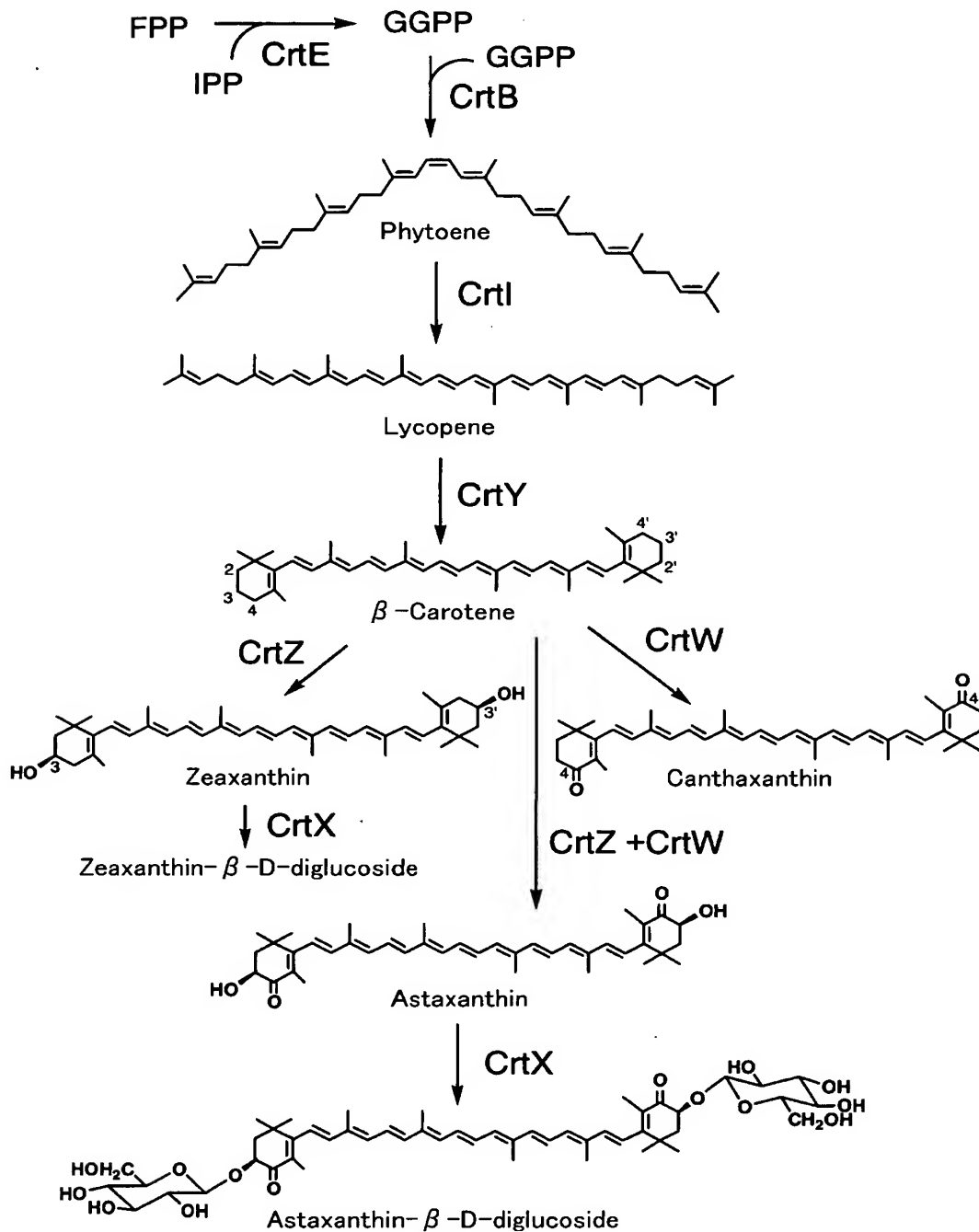


Fig. 2

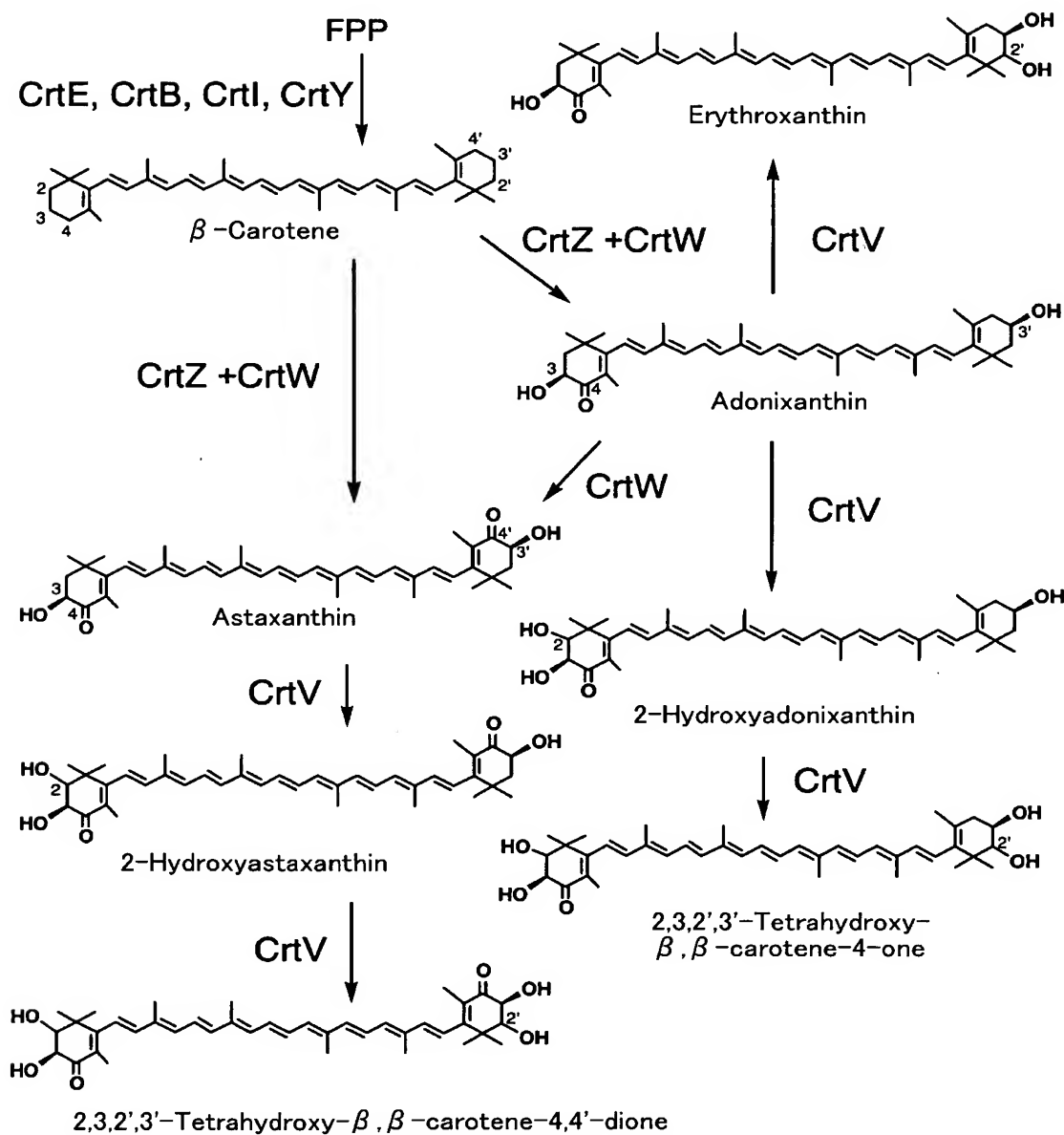


Fig.3

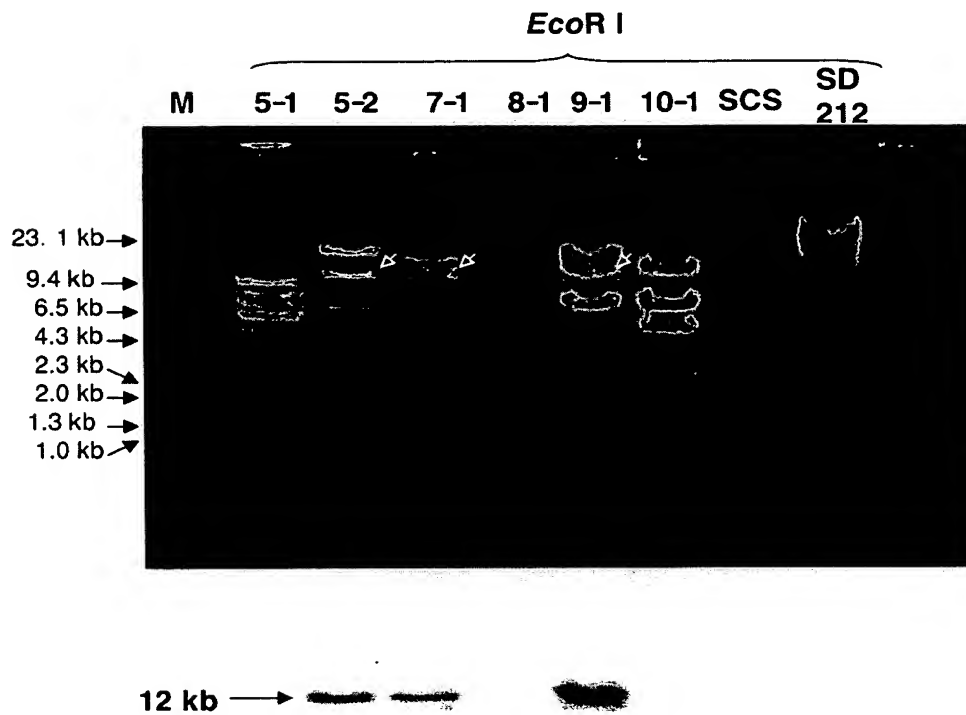


Fig. 4

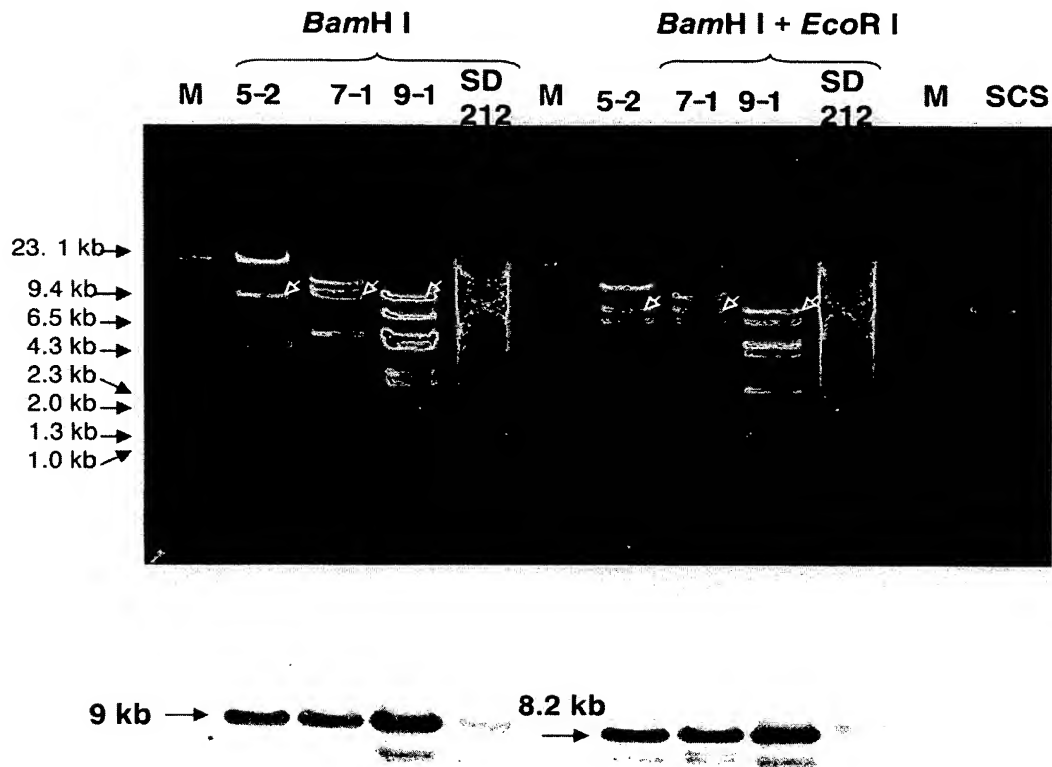
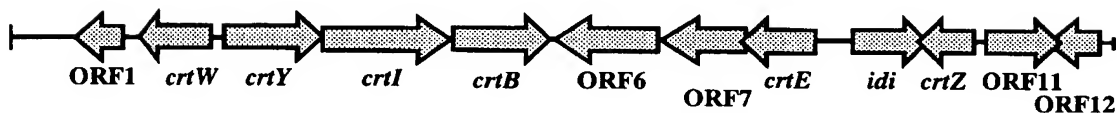
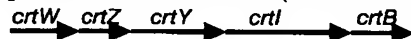


Fig. 5



Astaxanthin biosynthesis gene cluster

*Agrobacterium aurantiacum* (Paracoccus sp. MBIC01143 )



*Erythrobacter longus* Och 101



Canthaxanthin biosynthesis gene cluster of Bradyrhizobium sp. ORS278



Zeaxanthin biosynthesis gene cluster

*Erwinia uredovora* 20D3 (*Pantoea ananatis* )



*Xanthobacter autotrophicus* Py2

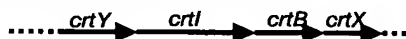


Fig. 6

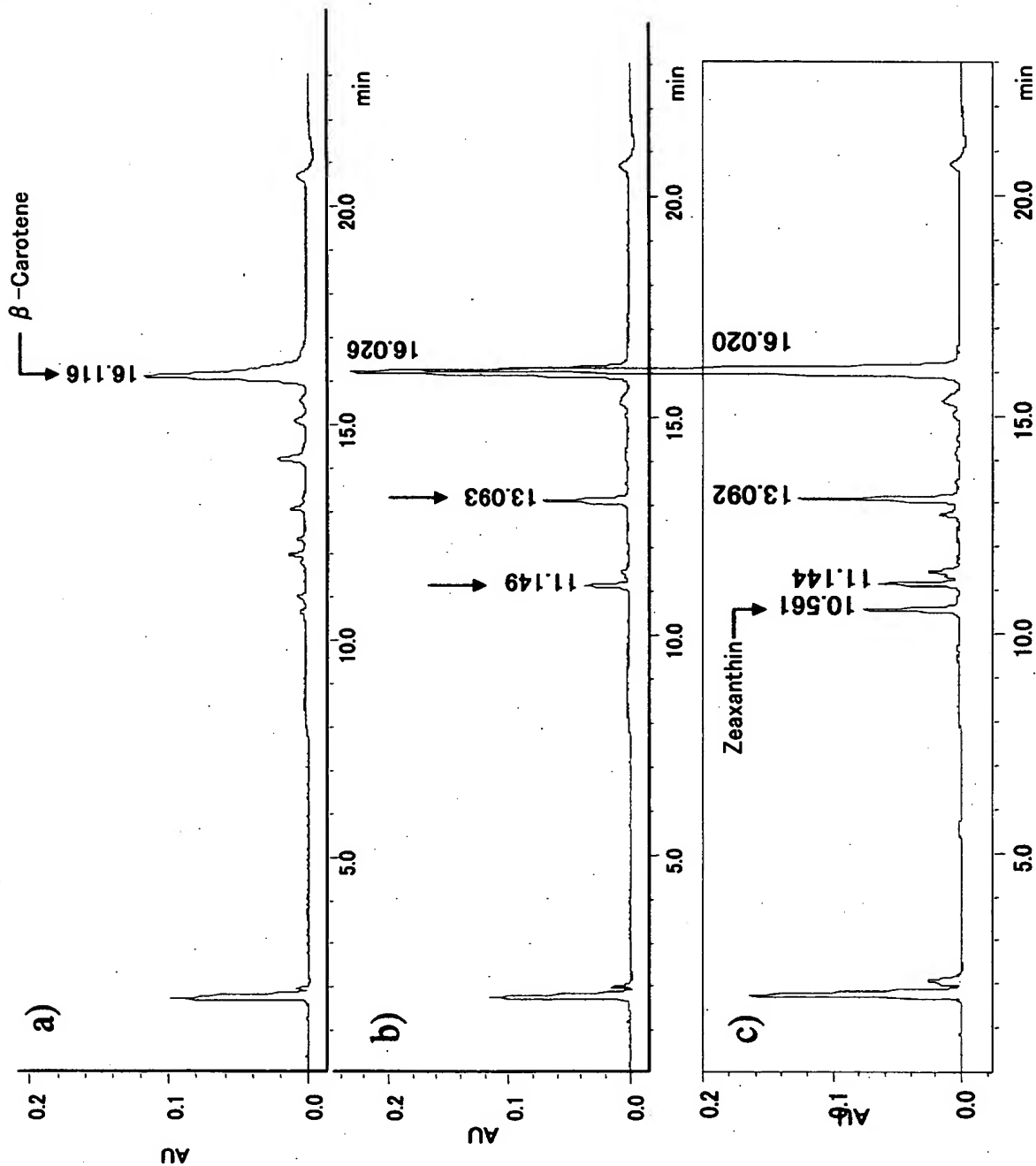


Fig. 7

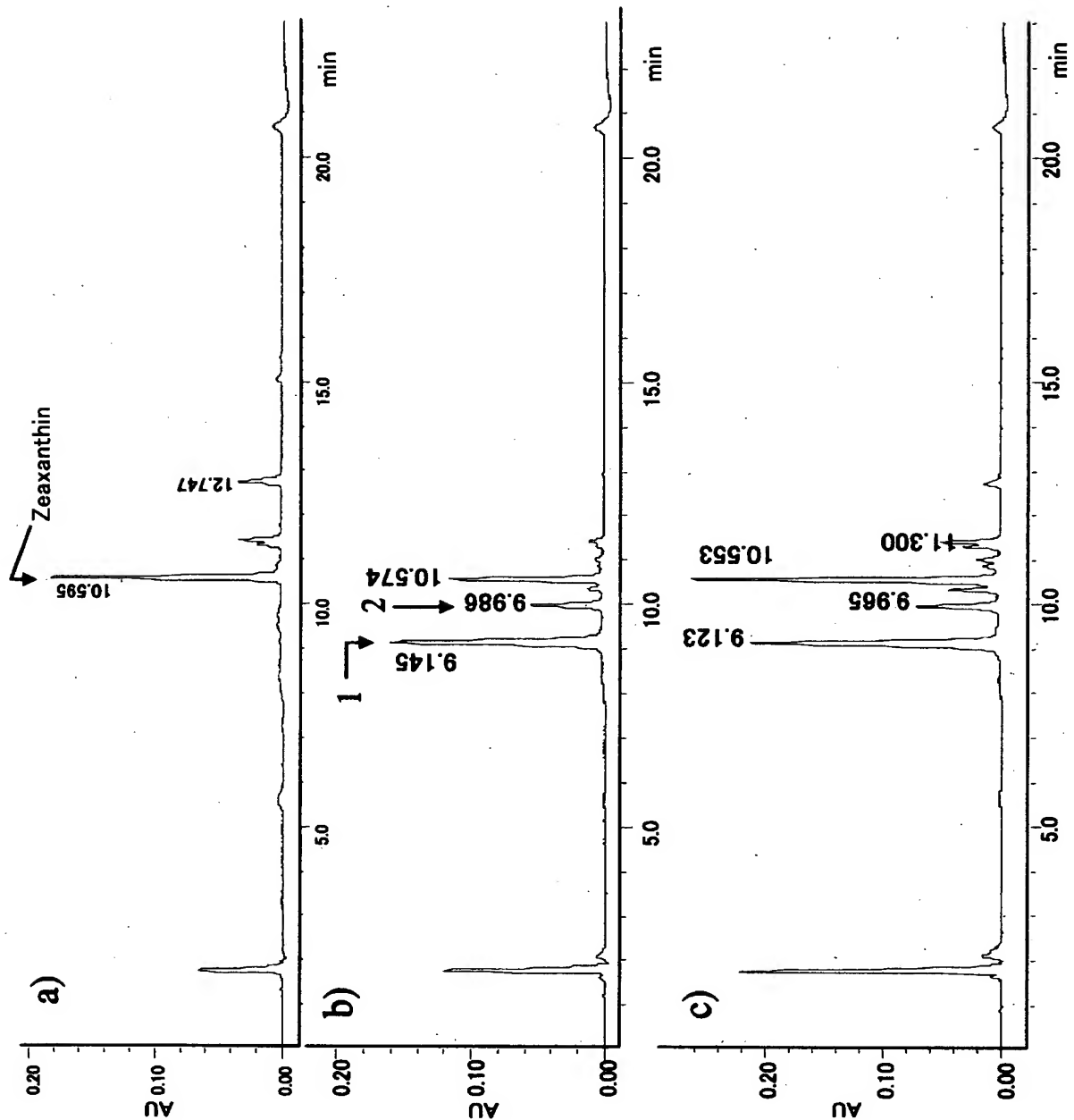


Fig. 8

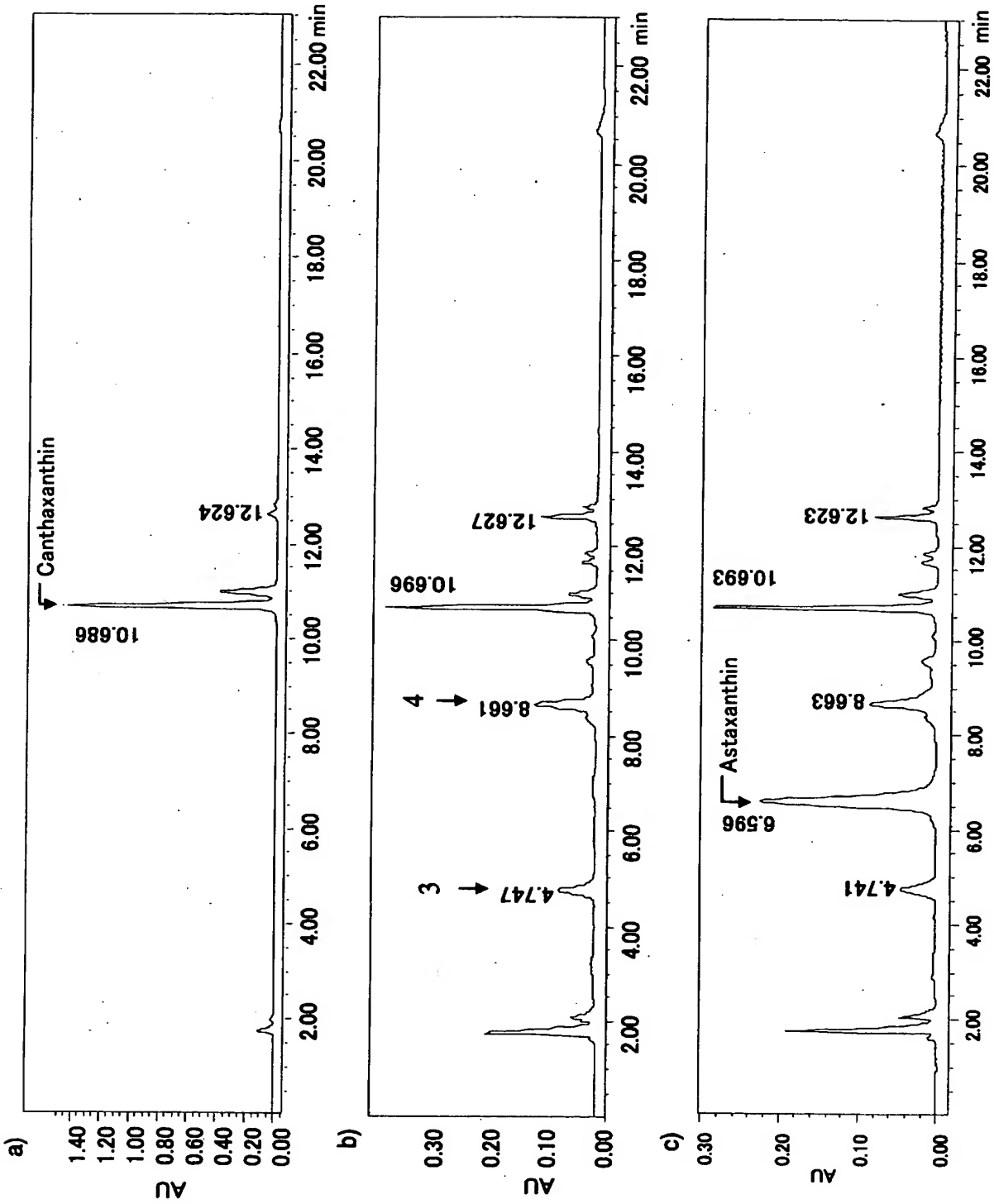




Fig. 9

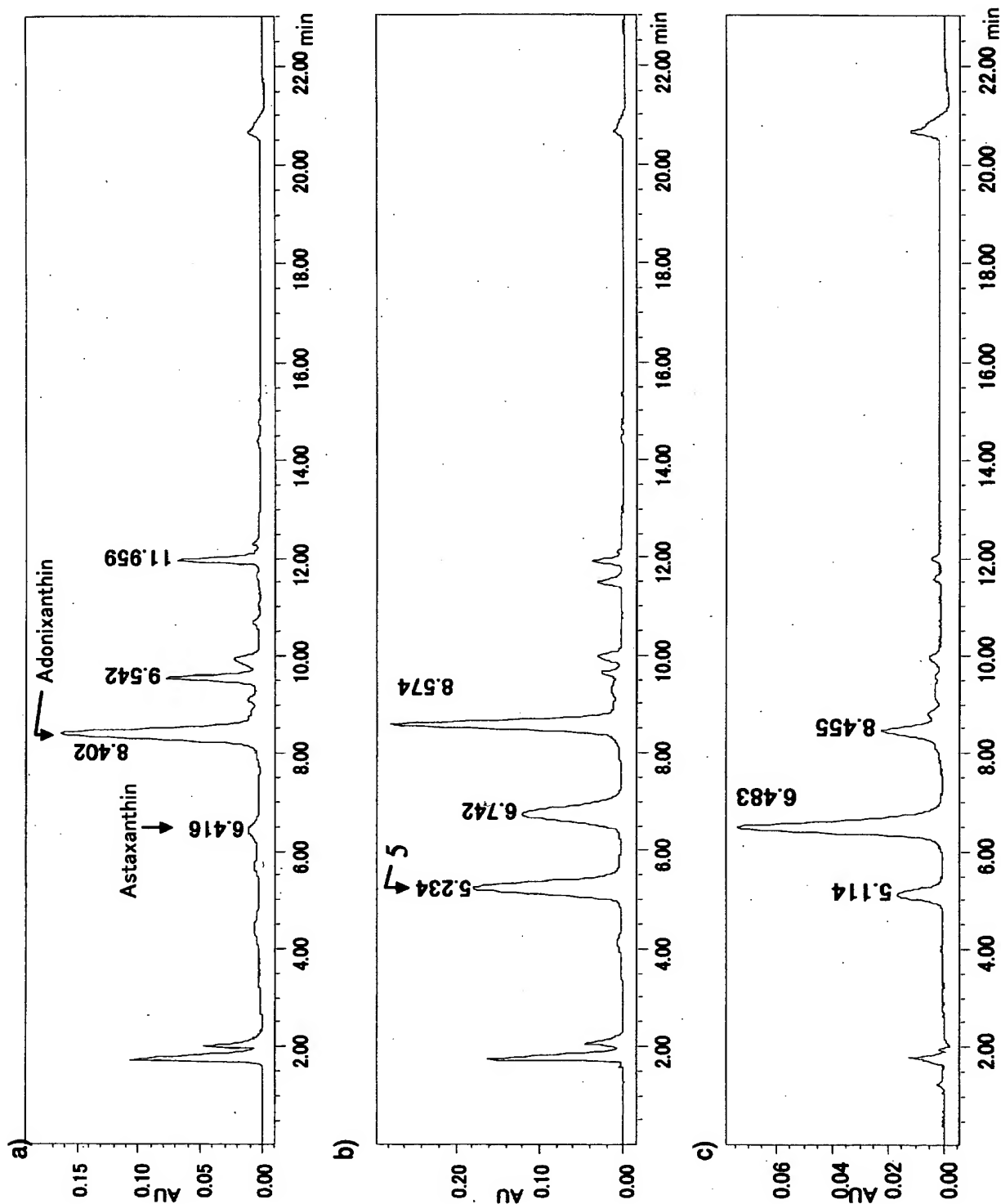


Fig.10

